

Appl. No. 10/694,464
Amendment dated January 16, 2007
Reply to Office Action of August 16, 2007

Remarks/Arguments

Claims 1 and 3-29 are pending and of these: claims 1, 3, 8-10, 19-21 and 26-29 stand rejected on varying grounds under §102(e) and §103(a); claims 4-7 and 22-25 are objected to but deemed to recite allowable subject matter; and claims 11-18 are allowed.

No claims have been amended. No new matter has been added by any amendment.

In view of the comments below, Applicant respectfully requests that the Examiner reconsider the present application including claims 1, 3-10, and 19-29 and withdraw the, respective, rejection of or objection to these claims.

a) Claims 1, 19-20 and 29 stand rejected under 35 U.S.C. §102(e) as being anticipated by Li, et al. (U.S. Patent No. 6,587,526 B1).

Claims 1 and 19 are in independent form with claims 20 and 29 dependent on claim 19. As noted in a previous response, claim 1 recites a feature whereby the processing a signal sample to reduce on channel interference relies on known properties between predesignated symbols of the received signal.

The Examiner, citing col. 4, lines 30-65 with FIG. 1 and portions of FIG. 2, maintains that Li et al. shows or suggests the features of claim 1. More specifically, the Examiner maintains that the Li et al synchronization signal extraction unit 102 includes "an optimum sampling window ... and extracts the timing synchronization signal in well-known fashion. The extracted signal is down-converted to yield a continuous time down converted and windowed

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signal.” The Examiner interprets “the extraction of the synchronization signal” as “to suppress on channel interference between mobile users” (further citing column 2 lines 50-45).

The Examiner continues, with reference to the col. 4 passage “This signal is supplied to delay estimation unit 103. In certain applications the received signal may be modulated by synchronization symbols assigned to the particular user mobile station. In such an instance, it is necessary to remove the synchronization symbols from the received signal. To this end, the assigned symbols for the particular received signal are supplied from synchronization symbol database 104 to delay estimation unit 103 where they are used to remove the synchronization symbols from the received signal, as described below in conjunction with FIG. 3. Delay estimation unit 103 generates a delay parameter estimate.”

Applicant believes, although this is not clear, that the Examiner is maintaining, in the immediately above paragraph, that removing the mobile specific synchronization symbols shows or suggests the claimed processing to suppress on channel interference relying on known properties between predesignated symbols.

Applicant respectfully disagrees with the Examiner’s construction of Li et al. on a number of points. First windowing as taught by Li et al is used to select a portion of the received signal that includes the cyclic prefix (see e.g., col. 2, lines 39-43). The windowing and down converting, etc. in stark contrast to the Examiner’s assertion and as is known does not, per se, have any impact on interference. More specifically, what ever interference was present in the portion of the received signal selected by the window will still be present after the selection, down conversion, etc. Thus the windowing etc of Li et al does not show or suggest the claimed processing the signal sample to suppress on channel interference.

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Secondly, the removal of mobile specific synchronization symbols of Li et al as cited by the Examiner again is not the claimed processing the signal sample to suppress on channel interference with this processing relying on known properties between predesignated symbols of the received signal. Whatever Li et al may be doing with the removal of the mobile specific sync symbols, it is not processing to suppress on channel interference with reliance on known properties between predesignated symbols all as specifically claimed.

With reference to claim 19, the Examiner rejects this claim on the same grounds as claim 1 due to similar scope. Given the above discussions, Applicant notes that Li et al does not show or suggest the claimed "process the signal sample to suppress on channel interference relying on a known structure of the on channel interference..."

Thus and for one or more of these reasons, Li et al does not show or suggest all features of claim 1 or claim 19 and therefore does not support a §102(e) rejection of this claim or claims dependent thereon. Thus, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 1, 19-20 and 29 under 35 U.S.C. §102(e) as being anticipated by Li, et al. (U.S. Patent No. 6,587,526 B1).

b) Claims 3 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Li, et al. (U.S. Patent No. 6,587,526 B1) as applied to claim 1 above and further in view of Kirkland (U.S. Patent No. 7,020,226 B1).

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Claim 3 is dependent on claim 1 and claim 21 is dependent on claim 19. Kirkland does not account for the deficiencies of Li et al as noted above and thus, claim 1 and claim 19 are clearly allowable over this combination of references. Thus, at least by virtue of dependency, claims 3 and 21 are likewise allowable. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 3 and 21 under 35 U.S.C. §103(a) as being unpatentable over Li, et al. (U.S. Patent No. 6,587,526 B1) and further in view of Kirkland (U.S. Patent No. 7,020,226 B1).

c) Claims 8-9 and 26-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Li, et al. as applied to claim 1 above and further in view of Bottomley (U.S. Patent No. 6,393,104 B1).

Claims 8-9 are dependent on claim 1 and claims 26-27 are dependent on claim 19. Bottomly does not account for the deficiencies of Li et al as noted above and thus, claim 1 and claim 19 are clearly allowable over this combination of references. Thus, at least by virtue of dependency, claims 8-9 and 26-27 are likewise allowable. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 8-9 and 26-27 under 35 U.S.C. §103(a) as being unpatentable over Li, et al. and further in view of Bottomley (U.S. Patent No. 6,393,104 B1).

d) Claims 10 and 28 stand rejected under 35 U.S.C §103(a) as being unpatentable over Li as applied to claim 1 above and further in view of Schmidl et al. (U.S. Patent No. 5,732,113).

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Claim 10 is dependent on claim 1 and claim 28 is dependent on claim 19. Schmidl et al. does not account for the deficiencies of Li et al as noted above and thus, claim 1 and claim 19 are clearly allowable over this combination of references. Thus, at least by virtue of dependency, claims 10 and 28 are likewise allowable. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 10 and 28 under 35 U.S.C. §103(a) as being unpatentable over Li, et al. (U.S. Patent No. 6,587,526 B1) and further in view of Schmidl et al. (U.S. Patent No. 5,732,113).

e) Claims 4-7 and 22-25 are objected to as being dependent upon a rejected base claim but deemed to recite allowable subject matter.

Applicant concurs that these claims recite allowable subject matter. In view of the above discussions and the allowability of claim 1 and claim 19, Applicant respectfully submits that this objection has been traversed and respectfully requests that the Examiner reconsider and withdraw this objection to claims 4-7 and 22-25.

f) Claims 11-18 are allowed.

Applicant agrees that these claims are allowable over all references of record.

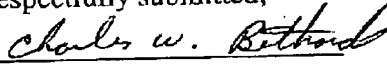
Accordingly, Applicant respectfully submits that the pending claims, as amended, clearly and patentably distinguish over the cited reference of record and as such are to be deemed

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allowable. Such allowance is hereby earnestly and respectfully solicited at an early date. If the Examiner has any suggestions or comments or questions, calls are welcomed at the phone number below.

Although it is not anticipated that any fees are due or payable other than the separately noted two month extension fee, the Commissioner is hereby authorized to charge any fees that may be required including any additional extension fees or credit any overpayments to Deposit Account No. 50-3435.

Respectfully submitted,


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